AMENDMENTS TO THE CLAIMS

Please amend the Claims as follows. Insertions are shown <u>underlined</u> while deletions are ~~struck through.~~

1 (currently amended):   A laser welding head-controlling system comprising:

a laser irradiating body with a laser inlet and a laser outlet <u>that directs a laser spot at a welding seam,</u>

~~plural~~<u>a plurality of</u> semiconductor lasers to oscillate ~~plural~~<u>a plurality of</u> linear laser beams configured to ~~be crisscrossed over a seam line~~ <u>direct said plurality of the linear beams at the laser spot or at a region already welded</u> for measuring a welding state<u> during or after a welding process,</u>

a CCD camera with a band-pass filter therein to pass through only ~~linear laser beams~~ reflected ~~by objects to be welded~~<u>laser beams from said linear laser beams and</u> to take in, as an image, said welding state ~~by said reflected beams~~, and

an image processor to process said image ~~of~~<u>relating to</u> said welding state.

2 (original):   A laser welding head comprising a laser welding head-controlling system as defined in claim 1, a laser oscillator to oscillate a laser for welding and a condenser to converge the oscillated laser.

3 (currently amended): A method for controlling a laser welding head comprising the steps of:

irradiating ~~plural~~<u>a plurality of</u> linear laser beams ~~to a target area of members to be welded so as to be crisscrossed over a seam line~~<u>onto parts during or after a welding process</u> to ~~measure~~<u>detect</u> a welding state<u> of the parts,</u>

taking, as an image, said welding state <u>on laser beams reflected by the parts in</u>~~in~~<u>to</u> a CCD camera ~~by means of linear laser beams reflected by said members~~,

processing said image ~~of~~<u>relating to</u> said welding state, and

controlling a laser welding head based on process data ~~of~~<u>relating to</u> said image.

4 (original):   A method for controlling a laser welding head as defined in claim 3, wherein the laser welding head is controlled by the CAD data of the parts to be welded.

5 (currently amended): A method for controlling a laser welding head as defined in claim 3, further comprising the step of monitoring welding defects of the parts to be welded based on the ~~processed~~<u>process</u> data and the CAD data.

6 (currently amended):   A method for controlling a laser welding head as defined in claim 4, further comprising the step of monitoring welding defects of the parts to be welded based on the ~~processed~~process data and the CAD data.

7 (currently amended): A laser welding head-controlling system for controlling the position of a laser welding head with respect to ~~an~~a target area of objects to be welded, comprising:

at least two semiconductor lasers for emitting linear laser beams configured to be crisscrossed over a seam line at a predetermined angle ~~toward~~at the target area or at a region already welded for detecting a welding state during or after a welding process;

a CCD camera provided with a band-pass filter, through which linear laser beams reflected by the objects pass exclusively, to generate an image of the target area; and

an image processor for processing the image of the target area to determine the progress of welding, thereby controlling the position of a laser welding head.

8 (original):   The laser welding head-controlling system according to Claim 7, further comprising a CAD data system which stores CAD data of the objects, said data being used to control the position of the laser welding head.

9 (original):   A laser welding head comprising the laser welding head-controlling system of Claim 7, a laser oscillator to oscillate a laser for welding, and a condenser to converge the oscillated laser.

10 (currently amended): A method for controlling the position of a laser welding head with respect to a target area of objects to be welded, comprising the steps of:

emitting at least two linear lasers beams so as to be crisscrossed over a seam line at a predetermined angle toward the target area during or after a welding process to detect a welding state of the target area;

generating an image of the target area exclusively from linear laser beams reflected by the objects passing through a band-pass filter, using a CCD camera provided with the band-filter;

processing the image of the target area to determine the progress of welding; and

controlling the position of the laser welding head.

11 (original):   The method according to Claim 10, further comprising using CAD data of the objects to control the position of the laser welding head.